

Miami-Dade Bicycle Parking Plan



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Project Objective

- Develop recommendations for new and improved bicycle parking facilities at Metrorail stations, park-and-ride lots, and other transit hubs





Project Methodology

- Task 1: Literature Review
- Task 2: Flyer Development and Distribution
- Task 3: Survey Development
- Task 4: Bicycle Count and Facility Inventory
- Task 5: Data Collection
- Task 6: Data Analysis
- Task 7: Review of MDT Plans
- Task 8: Review of Bike Locker Management Process
- Task 9: Final Report



Stations and Park-n-Ride Lots

- All 21 Metrorail Stations are included in the study
- 10 Park-and-Ride Lots/Transit Hubs are also included in the study:

1. Golden Glades
2. Hammocks Town Center
3. SW 152 St. Busway
4. MDCC South Campus
5. Coral Reef P-n-R



6. Cutler Ridge Busway
7. Harris Field
8. Metrobus Downtown
9. 72 St. and 88 Ave.
10. Sunset Strip



Findings from Peer Review

- Atlanta/MARTA
 - Unlimited bicycle access to rail
- San Francisco/BART
 - BART Bicycle Advisory Task Force; Bikes on BART Rules
- Long Beach/Bikestation®
 - Premier bicycle valet transit center
- New Jersey Transit
 - Short and long-term bicycle parking for almost 2000 patrons; "Tiedowns" for bikes on trains
- Portland/Tri-Met
 - Extensive bicycle component of Comprehensive Plan with specific Bicycle Parking Guidelines



Product Reviews

- Bicycle Lockers
 - Due to security concerns, only reviewed products by manufacturers that have responded with security-enhancing innovations
- Bicycle Racks
 - Focused on Inverted U racks and Rolling Racks
- Bikestation® concept
 - Guarded valet bicycle parking system





American Bicycle Security Company

- Model 302
 - 2 door/2 bicycle capacity
 - \$1,150 plus shipping/unit
 - Safety-View security window
- Model 301V (lower right)
 - 1 door/1 bicycle
 - \$809/unit
 - For limited space





Creative Pipe: CS and eLocker

- eLocker (above)
 - High tech bike locker
 - 2 door/2 bicycle unit
 - \$1800-2,500/unit
- CS Series (below)
 - Perforated sheet metal sides and door
 - 2 door/2 bicycle unit
 - \$1,350/unit





Cycle-Safe: Pro-Park Lockers

- Pro-Park
 - 2 door/2 bicycle capacity
 - Price depends on # of lockers in row; ranges from \$850-1,000 per bicycle
 - Security view windows





Bicycle Racks



- Cycle-Safe

- Inverted U
- 2 bikes/unit
- \$95/unit



- Dero

- Rolling Rack
- 11 bikes/unit
- \$430/unit

- Dero

- Hoop rack-inverted U
- 2 bikes/unit
- \$58-75/unit

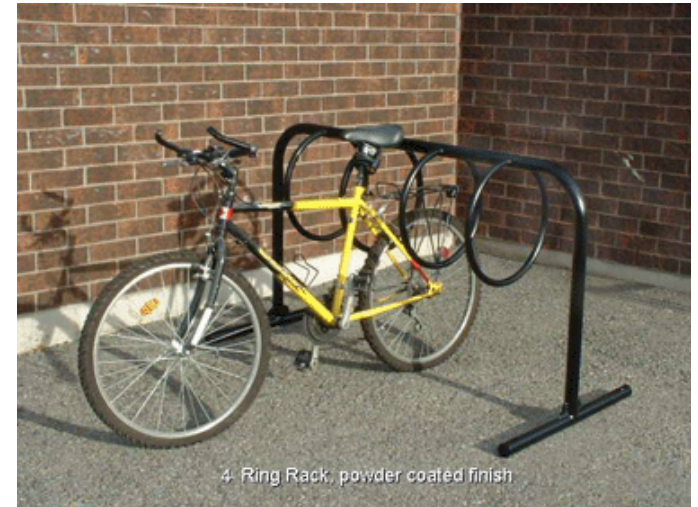


Bicycle Racks, continued



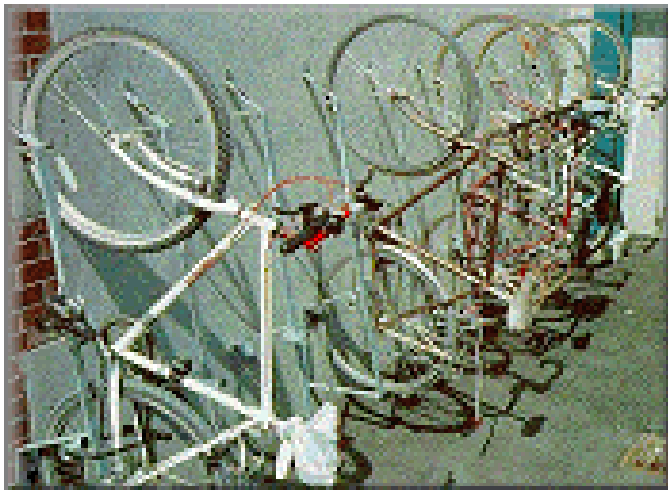
Madrax

- HD Winder
- 15 bikes/unit
- \$589/unit



Bike-Up

- Ring Rack
- 6 bikes/unit
- \$270/unit



Bike-Up

- Maximin Vertical
- 10 bikes/unit
- \$1,000/unit



Bikestation® Concept

- Bikestations are basically secure valet bicycle parking facilities integrated into transit hubs
- Combine bicycle parking with other services, such as repair shops, changing and shower rooms, and bicycle rental
- Three currently in operation
 - Long Beach, Palo Alto, and Berkeley
- Built in cooperation with the Bikestation Coalition;
www.bikestation.org





Bicycle Counts

First Bicycle Count: 127

Second Bicycle Count: 121

Third Bicycle Count: 125

Locker Renters: 53 current

Most Popular Stations:

- Coconut Grove
- Dadeland North and South
- South Miami
- Okeechobee
- Hialeah



Dadeland North Metrorail Station bike rack



Current Conditions

- 6 of the 21 stations have no bicycle racks
- Of the 15 with racks, 8 do not have sufficient space to meet demand
- Many racks are traditional “wheel-bender” type racks
- Only one of the ten park and ride lots has a bike rack
- Of the 246 lockers at Metrorail stations, 135 are damaged, of which 92 are deemed not rentable





Photo Log: Dadeland South





Photo Log: South Miami





Photo Log: Coconut Grove





Photo Log: Hialeah





Photo Log: Okeechobee





Photo Log: Vizcaya





Photo Log: Dr. M.L. King





Survey Findings

- 72 surveys were completed
- 15 survey respondents also participated in brief interviews
- 79% of respondents combine bicycling and transit 4 or more days per week



- 73% of respondents are commuting to work
- Over 40% also take their bicycles aboard Metrorail and 18% also use the bikes-on-bus program



Survey Findings, cont...

- Over half of respondents live within 2 miles of a rail station
- Primary reasons for combining bicycling and transit: exercise, save money, and close proximity to station
- Vast majority were male



- One third of respondents reported they do not have access to a car
- Over half were over the age of 40
- 35% earn less than \$20,000 per year, while 21% earned over \$70,000



Survey Findings, cont...

- 82% indicated that more bicycle parking is needed and 81% said more secure parking is needed
 - 76% stated that having parking visible by security personnel was important to very important
 - 72% stated that covered parking was important to very important
 - 71% reported that it was important for stations to have both short and long-term bicycle parking



Survey Finding, cont.

- Data collected during survey can be used for marketing and promotion
 - For example, people who combine bicycling with transit generally fall into two market segments:
 - Those earning under \$20,000/year who bicycle to save money and due to limited access to a car
 - Those earning over \$70,000/year who bicycle for exercise, to avoid traffic and for the environment
 - Improvements can also be marketed as a response to the needs and recommendations of the users, and a representation of public involvement



Recommendations

- Bicycle Parking Needs- Lockers
 - Remove current lockers, except at Dadeland North
 - Invest in high quality, secure lockers that provide security personnel access to view contents without compromising bicyclists' property
 - When possible, place within station area so only patrons have access
 - Place within sight of security post



Recommendations

- Bicycle Locker Management
 - Better lockers will be best improvement
 - Investigate available technology
 - Data tracking
 - Electronic key dispensing
 - Scan cards
 - PINs
 - Centralization of management, security and maintenance responsibilities



Recommendations

- Bicycle Parking Needs- Racks
 - Remove all wheel-benders and damaged racks
 - Replace with Inverted U racks
 - Locate racks undercover
 - Locate racks within sight of security post
 - Place signs indicating location of bicycle parking



Recommendations

- Bicycle Parking Needs- Cost and Funding
 - Cost: Depends on products selected
 - Short term parking cost (without installation labor costs) will range from \$6,500 to \$15,000 with shipping and will provide 280 more rack spaces
 - Long term parking cost (without installation labor costs) can range from \$125,000 to \$225,000 with shipping and will provide 198 lockers spaces



Recommendations

- Funding
 - TEA-21 Enhancement Funds
 - FTA Transit Enhancement Funds
 - CMAQ funds
 - Hazard Elimination Funds
 - Other Surface Transportation Program funds
- Recouping the cost
 - Investment in bicycle parking will be mitigated in fare box revenue and locker rental fees over time



Recommendations

- Bicycle Parking Policies
 - Role of Security Personnel
 - Future Stations
 - Bikestations Feasibility
 - Signage
 - Minimum standards for bicycle parking at Stations and Park-n-Ride lots
 - Connectivity to Metrorail and Metrobus
 - Bikes on Metrorail Policies
 - Data Tracking of bicycle use
 - Promotion of Bicycling



Any Questions?

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